

Book Reviews

group psychology indicate that the trust we place in ethics committees may need re-examination. The heavy emphasis placed on science in contemporary medical education may harbour dangers for our patients today and tomorrow, which a critical historical perspective such as that presented here may help to avert.

Otto M. Marx, Universität Heidelberg

FRANK FENNER (ed.), *History of microbiology in Australia*, Parkville, Australian Society for Microbiology, 1990, 8vo, pp. xiv, 610, illus., £35.00 or US \$75.00 incl. p. & p. from the Australian Society for Microbiology Inc., 191 Royal Parade, Parkville 3052, Australia.

In recent years, there have been a spate of political anniversaries conveniently linked to coincidental, though not identical, anniversaries in medical science, from the US Declaration of Independence bicentennial in 1976 to that of the French Revolution in 1989 (hard on the heels of the centenary of Pasteur's first anti-rabies inoculations in 1886). Now comes a history of microbiology in Australia, celebrating the bicentennial of the arrival of the First Fleet in 1788, and the centennial of Pasteur's mission to Australia in 1888, when by virtue of its isolated position as an "island laboratory", Australia served as an early, though not entirely successful, trial ground for Pasteur's method of biological control of a destructive rabbit population.

From then on, microbiologists and microbiological services in the widest sense, encompassing concerns with both human disease and diseases of livestock and crop plants (reflecting Australia's heavy dependence on its agriculture and sheep farming), have progressed to an unshakable position of international renown. The book is a tribute to the strength of Australian microbiology and its research institutes. The discoveries and achievements are legion, from Joseph Bancroft's eponymous adult worm of filariasis, to the more recent work on rabbit myxomatosis as it reflects on the evolution of virus-host relationships, and the inspired studies of influenza viruses, the roles of their respective haemagglutinins and neuraminidases, and their effect on antigenic drift.

For the serious student of any or all branches and ramifications of Australian microbiology, and its interaction with developments in the rest of the world in the twentieth century, this is an invaluable catalogue of achievements. It also includes potted biographies, with portraits, of many of the greater and lesser lights of the period. With nearly 300 contributors and "coordinators", and more than five times as many working scientists and their manifold contributions referred to in the text, in addition to detailed information concerning teaching institutions and research institutes, the more than 600 pages of the present volume, at the comparatively modest price of £35, is admirable value by today's publishing standards.

Lise Wilkinson, Royal Postgraduate Medical School, London

H. E. HENKES (ed.) and CL. ZRENNER (associate ed.), *History of ophthalmology 1*, Sub auspiciis Academiae Ophthalmologicae Internationalis, repr., *Documenta Ophthalmologica* 68, nos. 1-2, Dordrecht, Boston, and London, Kluwer, 1988, 8vo, pp. 184, illus., Dfl. 165.00/\$85.00/£49.95 (paperback).

The book is a collection of eighteen papers read at annual meetings of the Academia Ophthalmologica Internationalis; not all of them come up to a scholarly standard. A wide area, in time and in place, is covered although, of course, no comprehensive picture emerges.

The late Eugene Chan, e.g., contributed a survey of Chinese ophthalmology over more than 3,000 years, while Amalric (Albi, France) looks at the representation of the eye in African art, stressing its influence on such modern painters as Juan Gris. It is surprising to learn from Stefanopoulos (Athens) that legends about Hippocrates (actually rather fantastic ones) still live on in the villages of Cos. Reviewing the ophthalmic contents of the Hippocratic writings, Lascartos and Marketos (Athens) emphasize the concept of ocular affections as manifestations of general disease; they rightly think it useful to remind their highly specialized professional colleagues of this ancient truth.

Weale (London) is not the first to be fascinated by Leonardo da Vinci's notes and drawings concerning the eye, the brain, and vision; but as he totally neglects earlier theories and observations (and historical work as relevant as David C. Lindberg's), he is unable to give any valid historical assessment. Strangely enough, he attributes the first correct description of the inverted retinal image to Bishop Berkeley (1708/09), blandly ignoring Johannes Kepler (1604).

Albert (Boston) and Blodi (Iowa City) describe carefully the life and work of Georg Joseph Beer (1762–1821) of Vienna, the first professor of ophthalmology at any university. Their critical evaluation of Beer's teachings is perhaps somewhat too strongly influenced by the modern ophthalmologist's "knowing it better". Erroneously, they attribute the invention of iridectomy—the surgical formation of a new pupil when the natural one is obstructed—to Beer instead of William Cheselden. Jaeger (Heidelberg) draws a concise picture of his compatriot Theodor Leber (1840–1917) as a founder of experimental ophthalmology. Leber was essentially a biologist; the eye just served him as an extremely useful object for biological research—as it had already done for Virchow and others.

Some valuable papers come from the Netherlands. Van Nouhuys (Nijmegen) discusses the lacrimal surgery of Peter Camper, while the contributions of Donders's most influential Utrecht school to the development of ophthalmoscopy and tonometry are described by den Tonkelaar, Henkes, and van Leersum (Utrecht and Rotterdam).

The book is excellently printed and more than generously illustrated. Unfortunately, the price is rather prohibitive. Otherwise, the book will, despite its shortcomings, prove useful to medical historians interested in the fine science of ophthalmology.

Huldrych M. Koelbing, University of Zurich

DANIEL M. FOX, MARCIA MELDRUM, and IRA REZAK (eds), *Nobel Laureates in Medicine or Physiology: a biographical dictionary*, New York, Garland, 1990, 8vo, pp. xviii, 595, \$95.00.

The editors of this biographical dictionary suggest that the life stories of Nobel Laureates can be "read as a modern history of medicine". Certainly the announcement each year of the names of the winners of science's most glittering prizes is newsworthy. Critics may argue that the prizes are actually divisive within the scientific community and that the selections emphasize abstract and highly technical medical science at the expense of more important achievements, such as the eradication of smallpox or oral rehydration therapy of cholera. Nevertheless, the very fact that Nobel Prizes have become so important mean that a reference volume such as this has its uses, especially for more recent winners who are still alive or died too recently to be included in more authoritative works such as *The Dictionary of Scientific Biography*.

All Nobel Laureates for medicine of physiology between 1901 and 1989 are included. Individual biographies follow a standard format and in about four pages summarize the life and career and analyze the scientific achievements for which the award was made. Selected bibliographies refer the reader to a few primary sources and other biographical accounts. The standard of accuracy is reasonable, although a number of the American contributors have trouble with nuances of British life: the Oxford D.Phil. occasionally becomes a Ph.D., too many people are described as being elected to "membership" in the Royal Society, the entry on Sir James Black confuses King's College London with University College London, and one of the contributors, Frederic Holmes, has his name misspelt in the master list. A subject index would have increased the volume's usefulness, while the name index has all the appearance of a computer-generated one: thus, Sir William Bayliss is confused with his son Leonard, and J. J. R. MacLeod, mis-cited as F. F. R. McLeod in the entry on E. A. Doisy, gets duly indexed twice. Unfortunately, neither version in the index is correct.

W. F. Bynum, Wellcome Institute